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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* JAMES S. MROZINSKI, JAYSHREE SETH, and  
JAMES E. THORSON

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Appeal 2009-012766  
Application 09/876,704  
Technology Center 1600

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Before ADRIENE LEPIANE HANLON, DEMETRA J. MILLS and  
KAREN M. HASTINGS, *Administrative Patent Judges*.

MILLS, *Administrative Patent Judge*.

DECISION ON APPEAL<sup>1</sup>

This is an appeal under 35 U.S.C. § 134. The Examiner has rejected the claims for anticipation and obviousness. We have jurisdiction under 35 U.S.C. § 6(b).

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<sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

## STATEMENT OF THE CASE

The following claims are representative and read as follows:

1. An oil absorbing wipe material suitable for wiping a users skin comprising an oil absorbing porous substrate having a first face and a second face wherein the substrate has a transparency of less than 65 percent which porous substrate changes transparency upon absorption of oil on the first face, said porous substrate having a generally non-tacky flexible coating on at least a portion of the second face, said coating covering the porous substrate second face and comprising a film forming polymer with at least one additional additive comprising an active or skin modifying agent which can deliver a benefit to skin or hair contained within the film-forming polymer which coating is visible on the coated second face of the porous substrate and which coating does not penetrate to the opposite face of the porous substrate and which coating can deliver a benefit to skin or hair wherein the oil absorbing porous sheet comprises stretched film made of a thermoplastic material and wherein interstitial volume per unit area of said porous stretched film is in the range of 0.0001-0.005 cm<sup>3</sup> as calculated by the following equation:

interstitial volume per unit are = [film thickness(cm) x 1 (cm) x void content (%)]/100 (where the void content is the percentage of voids in the porous film) and the average pore size of the wipe material is from 3 to 15 microns.

45. A method for forming a flexible coating on an oil absorbing wipe material suitable for wiping a users skin comprising, providing an oil absorbing porous substrate having a first face and a second face wherein the substrate has a transparency of less than 65 percent, which porous substrate changes transparency upon absorption of oil on the first face, coating the porous substrate on at least a portion of the second face with a coating solution so as to cover the second face of the porous substrate comprising at least a film forming polymer, a particulate filler and an evaporative solvent with at least one additional additive which delivers a benefit to hair or skin, the coating solution having a viscosity of from 2000 to 100,000 cps and a percent solids of 60 to 80 percent wherein the coating is visible on the coated face of the porous substrate and which coating does not penetrate to the opposite face of the porous substrate.

*Cited References*

The Examiner relies on the following prior art references:

Sugiyama et al.	US 4,643,939	Feb. 17, 1987
Matsuo et al.	US 6,492,307 B1	Dec. 10, 2002
Hansen et al.	US 6,533,119 B1	Mar. 18, 2003
Kondo et al.	WO 99/29220	Jun. 17, 1999
Park et al.	US 5,939,093	Aug. 17, 1999

*Grounds of Rejection*

1. Claims 1, 4-7, 13-15, 18-20, 23-25, 29, 30 and 39-44 are rejected under 35 U.S.C. § 102(e) as being anticipated by Matsuo et al. (Ans. 4-5).
2. Claims 1, 4-7, 13-15, 18-20, 23-25, 29, 30 and 39-44 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsuo et al., in view of Hansen et al. (*Id.* at 6-7).
3. Claims 26-28, 31-33, 35-38, 45-53 and 55-72 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsuo et al., in view of Kondo et al. (*Id.* at 7).
4. Claims 1, 4-9, 12-15, 18-33, 35-53 and 55-72 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kondo et al., in view of Sugiyama et al. (*id.*).
5. Claims 10 and 54 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kondo et al. in view of Sugiyama et al. and Park et al. (*id.* at 9).

## PRINCIPLES OF LAW

In order for a prior art reference to serve as an anticipatory reference; it must disclose every limitation of the claimed invention, either explicitly or inherently. *See In re Schreiber*, 128 F.3d 1473, 1477 (Fed. Cir. 1997).

Our mandate is to give claims their broadest reasonable interpretation. *In re American Academy of Science Tech Center*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). “An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process.” *In re Zletz*, 893 F.2d 319, 322 (Fed. Cir. 1989). Moreover, it is during prosecution that applicants have “the opportunity to amend the claims to obtain more precise claim coverage.” *American Academy*, 367 F.3d at 1364.

“From the standpoint of patent law, a compound and all of its properties are inseparable; they are one and the same thing.” *In re Papesch*, 315 F.2d 381, 391 (CCPA 1963).

“In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a *prima facie* case of obviousness. Only if that burden is met, does the burden of coming forward with evidence or argument shift to the applicant.” *In re Rijckaert*, 9 F.3d 1531, 1532 (Fed. Cir. 1993) (citations omitted). In order to determine whether a *prima facie* case of obviousness has been established, we consider the factors set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966): (1) the scope and content of the prior art; (2) the differences between the prior art and the claims at

issue; (3) the level of ordinary skill in the relevant art; and (4) objective evidence of nonobviousness, if present.

*Discussion*

1. Claims 1, 4-7, 13-15, 18-20, 23-25, 29, 30 and 39-44 are rejected under 35 U.S.C. §102(e) as being anticipated by Matsuo et al. (Ans. 10 -11.)

ISSUE

The Examiner finds that Matsuo teaches each element claimed.  
(Ans. 10.)

Appellants argue that there is no teaching in Matsuo of a film forming polymer coating or a porous oil absorbing layer “that has a transparency of less than 65[%] and changes transparency upon absorption of oil.” (*Id.*)

The issue is: Does Matsuo teach the film forming element and oil absorbing layer claimed?

ANALYSIS

We select claim 1 as the representative claim as Appellants have not separately argued individual claims.

The Examiner finds that Matsuo teaches each element claimed.  
(Ans. 10.)

Appellants argue that there is no teaching in Matsuo of a film forming polymer coating or a porous oil absorbing layer “that has a transparency of less than 65[%] and changes transparency upon absorption of oil.” (*Id.*)

The Examiner finds that “Matsuo teaches the aqueous cleansing liquid retention layer 2 (the active containing layer) is made of polyurethane,

acrylic, polyester, or polyamide (column 5, lines 59 through column 6, lines 1-28). Polyurethane and polyester are well known in the pharmaceutical art as film forming polymer[s.]” (*Id.*) We further note that Matsuo teaches that the aqueous liquid retention layer may be a nonwoven fabric of cellulose (*see* col. 5. line 67 to col. 6, l.2) which is consistent with the cellulosic film forming polymers in the Specification. (*See* Spec., page 15, ll. 20.)

Appellants argue that the Examiner has not interpreted the term “coating” consistent with its use in the Specification. However, Appellants do not direct us to any portion of the Specification that discusses Appellants’ coating or defines the term “coating. (Reply Br. 2.)

We give the phrase “coating comprising a film forming polymer” its broadest reasonable interpretation. Since the term “coating” is not defined in the Specification, we give the term its ordinary meaning. “The ordinary and customary meaning of a claim term may be determined by reviewing a variety of sources. Some of these sources include the claims themselves; dictionaries and treatises; and the written description, the drawings, and the prosecution history.” *Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc.*, 334 F.3d. 1294, 1298 (Fed. Cir. 2003) (internal citations omitted).

The term “coating” means “a layer of covering material.”<sup>2</sup> Accordingly, we conclude that Matsuo does teach polyurethane and polyester, which are film forming polymers, as a layer of covering material covering the oil absorption layer, thus Matsuo teaches a coating comprising a film-forming polymer, as claimed.

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<sup>2</sup> Webster’s II New Riverside University Dictionary, (1994).

Appellants argue “that Matsuo does not teach the porous oil absorbing layer is one that has a transparency of less than 65 percent and changes transparency upon absorption of oil.” (Ans. 10.) The Examiner finds that the oil absorption layer of Matsuo would have the same transparency and pore size “because Matsuo teaches the use of the same thermoplastic polymer, manufactured from fiber having the same basis weight and the same fiber diameter.” (*Id.* at 11.) Appellants have not provided any persuasive technical reasoning nor evidence that the thermoplastic polymers of Matsuo would not possess the same transparency properties. Therefore, we are not persuaded by Appellants’ argument.

We agree with the Examiner and do not find that the Appellants have provided sufficient evidence to show that the oil absorption layer of Matsuo is not the same as that claimed.

#### CONCLUSIONS OF LAW

The cited reference supports the Examiner’s anticipation rejection.

2. Claims 1, 4-7, 13-15, 18-20, 23-25, 29, 30 and 39-44 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsuo et al., in view of Hansen et al. (Ans. 6-7.)

We select claim 1 as the representative claim as Appellants have not separately argued individual claims.

The Examiner finds that, with regard “to the properties of the oil absorbing layer, it would have been obvious to one of the skill in the art that the oil absorbing layer taught by Matsuo would have the claimed properties,



because Matsuo teaches the use of the same thermoplastic polymer.” (*Id.* at 6.) The Examiner further finds that

“Hansen teaches oil absorbing wipes made of porous sheet thermoplastic polymer such as polyolefin and polypropylene having fiber average diameter of less than 10  $\mu\text{m}$ , void volume of from 40 to 80%, average pore size of 3-15  $\mu\text{m}$ , and oil absorption capacity of from 0.7 to 6  $\text{mg}/\text{cm}^2$  (column 4, lines 25-62). Hansen further teaches the wipes having transparency of about 65% or less, having Hand of 8g or less, and having the ability to change from opaque to translucent after absorbing oil (column 5, lines 1-27).” (*Id.* at 6-7.)

Appellants do not point to any error in these findings. Instead, Appellants contend that neither Matsuo nor Hansen teach “a film forming polymer coating that penetrates into a porous oil absorbing layer.” (App. Br. 11.)

However, the pending claim 1 does not require that the film forming polymer penetrates into a porous oil absorbing layer.

For the reasons set forth above affirming rejection 1, we conclude that Matsuo teaches a film forming polymer layered on an oil absorption layer as claimed.

#### CONCLUSION

The obviousness rejection over Matsuo in view of Hansen is affirmed.

3. Claims 26-28, 31-33, 35-38, 45-53 and 55-72 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsuo et al. in view of Kondo et al. (Ans. 7).

We select claim 45 as representative of this rejection as Appellants have not argued the claims separately.

As found by the Examiner, “Matsuo does not expressly teach the claimed method. Kondo teaches a process for applying a coating composition to an oil absorbing sheet comprising applying to a surface to the oil absorbing sheet a coating solution containing fine particles of liquid-absorbing substance, solvent, and surfactant; and drying the coating to remove the solvent therefrom (page 9, lines 13-30).” (*Id.*)

Therefore, the Examiner concludes that one of ordinary skill in the art would have been motivated to use the process of Kondo to prepare the cleansing sheet of Matsuo, because Matsuo teaches coating the oily absorption sheet with a film, and because Kondo teaches the oily absorption sheet can be coated by applying a coating solution to the surface of the sheet to obtain an oil cleaning sheet that has excellent oil absorption and resistant to damage during use. (*Id.*) Appellants do not direct us to any error in the Examiner’s conclusion.

Appellants contend that neither Matsuo nor Kondo teach “a film forming polymer coating that penetrates into a porous oil absorbing layer.” (App. Br. 12.) However, pending claim 45 does not require the film forming polymer to penetrate into a porous oil absorbing layer. Claim 45 merely recites that the “coating does not penetrate to the opposite face of the porous substrate.”

Appellants also argue that the claimed viscosity and solidity are critical to obtaining a porous substrate whereby the coating is firmly anchored onto the porous substrate but does not penetrate to the opposite face of the substrate. (App. Br. 12.)

There is no dispute that the coating in Kondo penetrates the substrate to some degree but does not penetrate to the opposite face of the film. *See,*

*e.g.*, Kondo, p. 5, ll. 14-16 (at least one surface of the porous film contains the hydrophilic coating). Thus, on this record, it is reasonable to find that the coating in Kondo inherently has a viscosity and solidity within the claimed ranges.

### CONCLUSION

The rejection of claim 45 is reversed, and all the other rejected claims stand with claim 45.

4. Claims 1, 4-9, 12-15, 18-33, 35-53 and 55-72 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kondo et al. in view of Sugiyama et al. (Ans. 7-9).

Appellants argue individual claims separately which we address below.

#### Claim 1

“Kondo teaches a process for applying a coating composition to an oil absorbing sheet comprising applying to a surface to the oil absorbing sheet a coating solution containing fine particles of liquid-absorbing substance, solvent, and surfactant; and drying the coating to remove the solvent therefrom (page 9, lines 13-30).” (Ans. 8.) The Examiner finds that “Kondo does not teach the use of additive in the coating solution.” (*Id.*)

The Examiner finds that Sugiyama teaches a coating solution comprising an additive such as a bactericide. (Ans. 9.) The Examiner concludes that, “it would have been obvious to one of ordinary skill in the art to modify the coating solution of Kondo to include the bactericide in view of the teaching of Sugiyama to obtain the claimed invention, because Sugiyama teaches oil absorbing wipes containing bactericide exhibits better

cosmetic effect than the conventional oil absorbing wipes (column 4, lines 17-23) and because Sugiyama teaches bactericide contained in the oil absorbing wipes suppressed proliferation of bacteria therefore, reduce adverse effects of bacteria on the skin.” (*Id.*)

Appellants argue that the bactericide of Sugiyama is incorporated into the oil absorbing sheet and thus, suggests, at best, putting a bactericide in the oil absorbent microporous thermoplastic film of Kondo rather than the coating solution. (App. Br. 10.) We disagree.

Sugiyama discloses that the bactericide is dissolved in a suitable solvent and intermixed with a water soluble sizing agent, such as polyvinyl alcohol. Sugiyama discloses that this solution may be coated on the surface of the oil absorbing sheet (column 2, lines 55-68). Based on these teachings, the Examiner had a reasonable basis for concluding it would have been obvious to one of ordinary skill in the art to add the bactericide of Sugiyama to the coating solution of Kondo. (Ans. 9.)

Next, Appellants contend that the “coated bactericide-containing solution [of Sugiyama] penetrates to the other side of the sheet and remains at both the front and (r)ear side of the sheet” and therefore Sugiyama does not teach that the coating does not penetrate to the opposite face of the porous substrate, as claimed (Reply Br. 3).

Appellants’ argument fails to consider the prior art as a whole. There is no dispute that the coating in Kondo does not penetrate to the opposite face of the microporous thermoplastic film. The Examiner merely relies on Sugiyama as evidence that a bactericide may be useful in an oil absorbing cosmetic sheet. Appellants have not shown that adding the bactericide of Sugiyama to the coating of Kondo would cause the coating of Kondo to

penetrate to the other side of the oil absorbing layer. Thus, we are not persuaded by Appellants' argument.

#### Claims 4-5

Appellants argue that neither Kondo nor Sugiyama "teach coating of a film forming polymer having a particulate filler." (App. Br. 10.)

Kondo teaches applying to a surface to the oil absorbing sheet a coating solution (that includes a film forming polymer) containing fine particles of liquid-absorbing substance, solvent, and surfactant; and drying the coating to remove the solvent therefrom (*see* page 9, lines 13-30). Thus the Examiner's position that the oil absorbing sheet of Kondo and coating has a film forming polymer having a particulate filler is reasonable. (Ans. 8.)

#### Claims 8-9

Appellants argue claims 8 and 9 as a group. In particular, Appellants argue that neither Kondo nor Sugiyama "teach coating the porous substrate such [that] the film forming polymer coating penetrates a specific percentage of the porous substrate." (App. Br. at 10.)

Claim 8 recites that the coating "penetrates from 10 to 90 percent of the thickness of the oil absorbing porous substrate." There is no dispute that the coating in Kondo does not penetrate to the opposite face of the microporous substrate. However, the coating in Kondo does penetrate the substrate to some degree thereby retaining the coating on the substrate. In the absence of a showing of criticality, we conclude that optimizing the amount of penetration through routine experimentation would have been within the skill of the ordinary artisan.

Claim 12

Appellants contend “there is no teaching in Kondo or Sugiyama of using salicylic acid or other additive in a film forming polymer layer.” (App. Br. 10.)

However, the Examiner concluded that the combined teachings of Kondo and Sugiyama teach adding a bactericide such as salicylic acid to a coating layer as claimed. (Ans. 9.) For the reasons set forth above, Appellants have failed to direct us to any harmful error in this conclusion or the underlying facts supporting this conclusion.

Claim 45

Appellants argue that the viscosity and solidity recited in claim 45 are critical to obtaining a porous substrate whereby the coating is firmly anchored onto the porous substrate but does not penetrate to the opposite face of the substrate. (App. Br. 12.)

There is no dispute that the coating in Kondo penetrates the substrate to some degree but does not penetrate to the opposite face of the film. *See, e.g.,* Kondo, p. 5, ll. 14-16 (at least one surface of the porous film contains the hydrophilic coating). Thus, on this record, it is reasonable to find that the coating in Kondo inherently has a viscosity and solidity within the claimed ranges.

### CONCLUSION

We are not persuaded that the cited references do not support the rejection before us and the obviousness rejection is affirmed.

5. Claims 10 and 54 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kondo et al. in view of Sugiyama et al. and Park et al. (Ans. 9-10).

Appellants do not address this rejection in the Appeal Brief or Reply Brief concerning Park, therefore the rejection of these claims is Summarily Affirmed.

### TIME PERIOD

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

### AFFIRMED

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